

Applicants: Kenneth W. Whitley
Serial No.: 10/742,307
Filing Date: December 19, 2003
Docket No.: P-5655/7 (102-513 RCE)
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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A roller bottle for cell growth culturing, comprising a bottom wall, a substantially cylindrical side wall and a top wall, said bottom wall being formed unitarily with said side wall, said top wall having an opening for providing access to an interior portion of said roller bottle, said side wall being formed with at least one helical pleat extending along a right cylindrical section of said side wall substantially from said bottom wall substantially to said top wall with adjacent portions of said helical pleat being in abutting contact, said helical pleat terminating along straight end portions of said right cylindrical section of said side wall, said straight end portions being disposed generally perpendicularly to a longitudinal axis of the roller bottle, said helical pleat providing a large surface area for said cell growth culturing and providing a helical channel for distributing liquid to interior surface regions of said bottle in response to rotation of said bottle about a longitudinal axis of said cylindrical side wall, wherein said helical pleat includes at least one outer apex located between first and second inner apices, said first and second inner apices being located generally equally from said outer apex, and wherein said bottom wall and said top wall each terminate at a diameter generally equal to a diameter defined by said outer apex.

2. (Original) The roller bottle of claim 1, wherein the roller bottle is formed unitarily from a plastic material.

3. (Original) The roller bottle of claim 2, wherein the plastic material is blow molded.

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4. (Original) The roller bottle of claim 3, wherein the plastic material is less than 0.060 inch thick.

5. (Original) The roller bottle of claim 1, wherein the helical pleat is interrupted by at least one planar section extending substantially from said bottom wall to said top wall.

6. (Original) The roller bottle of claim 1, wherein the helical pleat defines a pitch of between approximately 2° and 10° .

7. (Original) The roller bottle of claim 1, wherein said pleat defines a substantially V-shaped cross-section.

8. (Original) The roller bottle of claim 7, wherein apices of adjacent passes of said helical pleat are spaced from one another by a distance of approximately 0.82 cm.

9. (Cancelled).